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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SUGHRUE MION ZINN MACPEAK & SEAS  
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EXAMINER

NGHIEM, MICHAEL P

ART UNIT PAPER NUMBER

2863

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/24Q490

Applicant(s)

HARVEY ET AL.

Examiner

Michael P Nghiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 and 22-34 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20, 24-27, 29, 31, 33 and 34 is/are allowed.
- 6) ☒ Claim(s) 22, 23 and 28 is/are rejected.
- 7) ☒ Claim(s) 30 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 May 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some \* c) ☐ None of:
    - 1. ☒ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

The Amendment filed on May 22, 2003 has been acknowledged.

### *Status of Claims*

1. Claims 28 and 29 are not new claims.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the protrusion and/or groove axially **extends from the second ink supply path**, across the first open end, and **into the first ink supply path**" (claims 22, 28) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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***Claim R jections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 22, 23, and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Boyd et al. (US 5,812,165).

Boyd et al. discloses all the claimed limitations including:

- an ink supply passage structure (Figs. 2, 5) comprising:
  - a first ink supply path (bottom passage of 40b) having a first open end (top open end of top passage, Fig. 5), wherein said first ink supply path axially terminates at the first open end (Fig. 5);
  - a second ink supply path (top passage of 40b) connected to and extending from the first open end to be communicated with the first ink supply path (Fig. 5), wherein the second ink supply path has a cross sectional area larger than that of the first ink supply path (top passage has larger cross sectional area than bottom passage, Fig. 5), and

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wherein the first open end of the first ink supply path forms an axial terminus of the second ink supply path (Fig. 5);

- a protrusion (protrusion between 50) and/or groove (50) axially provided to the second ink supply path, wherein the protrusion and/or groove is contiguous to at least the first open end of the first ink supply path (Fig. 5),

- wherein the first ink supply path axially terminates at a longitudinal axis of the first ink supply path (Fig. 5),

- wherein the longitudinal axis of the first ink supply path is substantially parallel to a longitudinal axis of the second ink supply path (Fig. 5), and

- wherein the protrusion and/or groove axially extends from the second ink supply path, across the first open end, and into the first ink supply path (50 extends along bottom and top passages, Fig. 5);

- a portion of the second ink supply path containing the protrusion and/or groove is in the form of a conical chamber (Fig. 5).

#### ***Allowable Subject Matter***

4. Claims 1-20, 24-27, 29, 31, 33, and 34 are allowed.

5. Claims 30 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Reason For Allowance***

6. The combination as claimed wherein an ink jet recording apparatus comprising a joint area being tapered such that a cross-sectional area of said joint area gradually changes along a direction from said second ink supply path to said first ink supply path (claims 1, 15) or ink induction paths are formed by mounting a rib formation member in an enlarged portion (claim 10) or ink induction paths are formed in a holder that is mounted in an enlarged portion, said holder including a rod-shaped member that is positioned coaxially with said second ink supply path (claim 12) or a protrusion and/or groove axially provided to the second ink supply path and axially terminates at the first open end of the first ink supply path (claim 20) or a filter located at an opposite axial terminus of the second ink supply path, wherein said opposite axial terminus is opposite to and downstream from said axial terminus of the second ink supply path (claim 24) or the second ink supply path has a cross sectional area larger than that of the first ink supply path and the first ink supply path is located upstream of the second ink supply path in a direction in which ink is supplied from the ink cartridge to the recording head (claims 29, 30, 32) is not disclosed, suggested, or made obvious by the prior art of record.

***Response to Arguments***

7. Applicant's arguments filed on May 22, 2003 have been fully considered but they are not persuasive.

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With respect to the drawing objections, Applicants argue that, in Figs. 11a and 11b, the protrusion is shown by the induction member (49).

Examiner's position is that Figs. 11a and 11b do not show the induction member (49) to axially extend from the second ink supply path, across the first open end, and **into the first ink supply path** as recited in claims 22 and 28.

With respect to the 35 USC 102 rejections, Applicants argue that Boyd does not disclose a second ink supply path having a cross sectional area larger than a first ink supply passage.

Examiner's position is that Boyd discloses a second ink supply path (top passage of 40b) having a cross sectional area larger than a first ink supply passage (bottom passage of 40b) (see Fig. 5).

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
**MICHAEL NGHIEM**  
**PRIMARY EXAMINER**

Michael Nghiem

July 20, 2003